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10/013,107	12/07/2001	Wayne M. Wagner	758.1231US01	9461

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EXAMINER

HEWITT, JAMES M

ART UNIT

PAPER NUMBER

3679

DATE MAILED: 02/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/013,107

Applicant(s)

WAGNER ET AL.

Examiner

James M Hewitt

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other:

## **DETAILED ACTION**

### ***Specification***

Applicant is reminded of the proper language for an abstract of the disclosure.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The first sentence of the abstract includes the implied phrase "...described in this disclosure."

### ***Claim Objections***

Claim 15 is objected to because of the following informalities: Claim 15 states that the strap has a wall thickness in a given range. Claim 10, from which claim 15 depends, on line 10 already introduces "a wall thickness" of the strap. It is apparent that "a wall thickness" as recited in claim 15 and "a wall thickness" as recited in claim 10 reference the same wall thickness of the strap. The Examiner therefore suggests replacing "a wall thickness" in claim 15 with "the wall thickness". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13 line 1, the phrase "the metal" lacks antecedent basis. It is apparent that claim 13 should depend from claim 12 and not claim 10, as claim 12 provides antecedent basis for the phrase "the metal".

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imes et al (US 6,305,054) in view of Smith (US 2,690,193).

With respect to claim 1, Imes et al discloses a pipe clamp (20) comprising: a strap (22) adapted to surround a pipe, the strap including first and second opposing ends (42 and 44) separated by a gap (46); a fastener (30) that extends across the gap for tightening or loosening the clamp by narrowing or widening the gap between the first and second opposing ends of the strap. Imes et al fails to teach that the first end (42) of the strap includes at least one projection, and that the second end (44) of the strap defines at least one recess for receiving the projection when the clamp is tightened. Smith teaches a pipe clamp comprised of two half sections (10) each with interlocking fingers (13) and receiving pockets (14). The fingers and pockets function as a guide for closing the clamping sections and permitting the two sections to be fastened together by fastening means (16, 18). It should also be appreciated that providing interlocking fingers and pockets provides a more reliable engagement between two mating clamping sections, and when combined with fastening means (16, 18) ensures securement of the two sections. In view of Smith's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Imes et al with a plurality of interlocking fingers and pockets (projections and recesses) at each of the mating ends (42 and 44) in order to better align and guide the two ends together and to ensure that the ends remain engaged when the clamp is tightened about a pipe joint.

With respect to claim 2, wherein the first opposing end includes two projections, and the second opposing end includes two recesses (refer to Smith). Smith teaches using a plurality of (up to 6) interlocking projections and recesses.

With respect to claim 3, wherein the projections include truncated triangular shapes (refer to Smith).

With respect to claim 4, wherein the strap includes an increased diameter portion (24) and a reduced diameter portion (26), the reduced diameter portion and the increased diameter portion being separated by a step (28). Also refer to Figure 4 of Ives.

With respect to claim 5, wherein the fastener includes a bolt (31) having a base end (48) and a threaded end (52), wherein the clamp includes a sleeve (50) connected to the second opposing end (44) of the strap, wherein the base end of the bolt is connected to the first opposing end (42) of the strap, and wherein the threaded end of the bolt extends through the sleeve.

With respect to claim 6, wherein the strap includes metal (see col. 5 lines 5-6).

With respect to claim 7, wherein the metal is stainless steel or aluminized steel (see col. 5 lines 5-6).

With respect to claim 8, wherein the strap has a width (axial length L1) of less than 2 inches (see col. 4 lines 42-44).

With respect to claim 9, wherein the strap has a wall thickness in the range of .065 – 0.105 inches (see col. 5 line 11).

With respect to claim 21, wherein the first opposing end includes two projections, and the second opposing end includes two recesses (refer to Smith). Smith teaches using a plurality of (up to 6) interlocking projections and recesses.

With respect to claim 22, wherein the projections include truncated triangular shapes (refer to Smith).

With respect to claim 23, wherein at least one projection has a truncated triangular shape (refer to Smith).

With respect to claim 10, Imes et al discloses a pipe clamp (20) comprising: a strap (22) adapted to surround a pipe, the strap including first and second opposing ends (42 and 44) separated by a gap (46); a fastener (30) that extends across the gap for tightening or loosening the clamp by narrowing or widening the gap between the first and second opposing ends of the strap. Imes et al fails to teach that the first end (42) of the strap includes a first portion, and that the second end (44) of the strap includes a second portion, wherein the first and second portions are configured to extend circumferentially past one another when the clamp is tightened while remaining substantially within a cylindrical boundary defined by a wall thickness of the strap. Smith teaches a pipe clamp comprised of two half sections (10) each with interlocking fingers (13) and receiving pockets (14). The fingers and pockets function as a guide for closing the clamping sections and permitting the two sections to be fastened together by fastening means (16, 18). It should also be appreciated that providing interlocking fingers and pockets provides a more reliable engagement between two mating clamping sections, and when combined with fastening means (16, 18) ensures securement of the two sections. In view of Smith's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Imes et al with a

plurality of interlocking fingers and pockets (projections and recesses) at each of the mating ends (42 and 44) in order to better align and guide the two ends together and to ensure that the ends remain engaged when the clamp is tightened about a pipe joint.

The claimed first portion would be a projection or finger (13), and the claimed second portion would be a recess or pocket (14). A front part of the finger would extend circumferentially past a front part of the recess when the clamp is tightened, just like in the present invention. The finger and recess would meanwhile remain within a cylindrical boundary defined by a wall thickness of the strap, i.e. the finger and recess would be engaged and aligned with one another, and not offset.

With respect to claim 11, wherein the fastener includes a bolt (31) having a base end (48) and a threaded end (52), wherein the clamp includes a sleeve (50) connected to the second opposing end (44) of the strap, wherein the base end of the bolt is connected to the first opposing end (42) of the strap, and wherein the threaded end of the bolt extends through the sleeve.

With respect to claim 12, wherein the strap includes metal (see col. 5 lines 5-6).

With respect to claim 13, wherein the metal is stainless steel or aluminized steel (see col. 5 lines 5-6).

With respect to claim 14, wherein the strap has a width (axial length L1) of less than 2 inches (see col. 4 lines 42-44).

With respect to claim 15, wherein the strap has a wall thickness in the range of .065 – 0.105 inches (see col. 5 line 11).



With respect to claim 16, Imes et al discloses a pipe clamp (20) comprising: a metal strap (22; see col. 5 lines 5-6) including first and second opposing ends (42 and 44) separated by a gap (46); a bolt (31) that extends across the gap for tightening or loosening the clamp by narrowing or widening the gap between the first and second opposing ends of the strap, the bolt having a base end (48) connected to the first opposing end (42); a sleeve (50) connected to the second opposing end (44) for receiving a free end (52) of the bolt. Imes et al fails to teach that the first and second ends of the strap are configured to intermesh when the clamp is tightened. Smith teaches a pipe clamp comprised of two half sections (10) each with intermeshing fingers (13) and receiving pockets (14). The fingers and pockets function as a guide for closing the clamping sections and permitting the two sections to be fastened together by fastening means (16, 18). It should also be appreciated that providing interlocking fingers and pockets provides a more reliable engagement between two mating clamping sections, and when combined with fastening means (16, 18) ensures securement of the two sections. In view of Smith's teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Imes et al with a plurality of intermeshing fingers and pockets (projections and recesses) at each of the mating ends (42 and 44) in order to better align and guide the two ends together and to ensure that the ends remain engaged when the clamp is tightened about a pipe joint.

With respect to claim 17, wherein the first and second opposing ends include circumferential teeth having truncated triangular shapes (refer to Smith).

With respect to claim 18, wherein the strap has a width (axial length L1) of less than 2 inches (see col. 4 lines 42-44).

With respect to claim 19, wherein the strap has a wall thickness in the range of .065 – 0.105 inches (see col. 5 line 11).

With respect to claim 20, wherein the strap includes stainless steel or aluminized steel (see col. 5 lines 5-6).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cassel (US 4,056,273), Calmettes et al, McDowell, Berger, Morris ('781), Morris ('551), Hulsey, Solum et al, Greve, Goodall, Koehler, Foti, Arbogast, Matter et al, Cassel (WO 80/02317), and Stott all constitute prior art device considered by the Examiner to be relevant to the claimed invention(s).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hewitt whose telephone number is 703-305-0552. The examiner can normally be reached on M-F, 930am-600pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on 703-308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

*jmh*  
jmh  
February 25, 2003

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